

REMARKS

By the foregoing Amendment, claims 6-8 and 14-20 have been canceled without prejudice or disclaimer and new claims 21-25 have been added. For the reasons discussed at the interview, and in view of the foregoing amendments and following remarks, Applicants respectfully request that the Examiner reconsider all outstanding rejections, and that they be withdrawn.

Rejection Under 35 USC §103

At paragraph 4 of the Office Action, the Examiner rejected claims 9-13 as being unpatentable over U.S. Patent No. 6,133,871 to Krasner ("Krasner") in view of U.S. Patent No. 5,271,034 to Abaunza ("Abaunza").

Specifically, the Examiner noted that Krasner disclosed all of the features of claim 9 except for "storing one millisecond segments and converting these one millisecond segments to the frequency domain." Applicant submits that the deficiencies of Krasner stretch beyond the Examiner's simple characterization. In particular, Applicant notes that consideration of the storing and converting of one millisecond segments without regard to the usage of the converted one millisecond segments would nullify all significance of the distinction. In other words, if the type of data and usage of the data is not considered, then the purported shortcomings of Krasner would simply be the frequency conversion of 1 ms of sampled data. This is certainly not the case.

In fact, not only does Krasner not frequency convert one millisecond segments, but Krasner also does not multiply "the frequency domain representation of the one millisecond segment of the GPS signal by a frequency representation of a Gold code corresponding to a GPS satellite in view of the GPS receiver to obtain a product; convert "the product to the time domain to obtain a correlation signal;" and detect "a peak correlation signal as the Gold code phase."

All of these shortcomings are not made up by the purported teachings of Abaunza. In Abaunza, the FFT signal is used in a process to determine a carrier frequency. Here, the power

signal VV* is used by average power detector 108 and peak power detector 114. As noted at col. 11, lines 47-51, "peak power detector 114 generates a carrier frequency estimate representative of the center frequency of the frequency bin in which maximum power of the correlated signal is detected."

In Applicant's system, on the other hand, the FFT signal is multiplied by a Gold code FFT signal. After an inverse FFT process is applied to the product, a peak detector is then used to detect a code phase.

As illustrated, the use by Abaunza of a frequency converted one millisecond segment is for an entirely different purpose. To say that it would be obvious to incorporate the one millisecond frequency conversion of Abaunza into the system of Krasner would therefore require some motivation to do so. Since Abaunza is geared toward an entirely different end as compared to Krasner, no such motivation is apparent or been suggested by the Examiner. In fact, it appears that the only motivation suggested by the Examiner is that the "FFT processing of the signal allows for the max power of the signal to be detected correctly." If anything, a motivation of correct detection would dictate that a greater amount of sample data be taken, such as the multi-frame averaging used in Krasner. Applicant therefore submits that the motivation presented by the Examiner is insufficient to justify a combination of Krasner and Abaunza.

For at least these reasons, Applicant submits that the Examiner has not established a *prima facie* case of obviousness. The obviousness rejection of claim 9 is therefore traversed. As claims 10-13 are dependent on independent claim 9 and incorporate all of the features of claim 9, Applicant also submits that the rejection of claims 9-13 are similarly traversed for at least the reasons stated above.

At paragraph 5 of the Office Action, the Examiner rejected claims 6-8 and 14-20 as being unpatentable over Krasner in view of Abaunza and further in view of U.S. Patent No. 5,912,558 to Halamek et al. By the amendment above, Applicants have canceled claims 6-8 and 14-20 without prejudice or disclaimer. The rejection of the claims 6-8 and 14-20 is therefore rendered moot.


Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections, and that they be withdrawn. The Examiner is invited to telephone the undersigned representative if an interview might be useful for any reason.

Respectfully submitted,

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